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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,670	09/30/2004	Yi-Bing Lee	12847-US-PA	5669

31561 7590 09/12/2007  
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER
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LEE, PING

ART UNIT	PAPER NUMBER
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2615

NOTIFICATION DATE	DELIVERY MODE
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09/12/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

<b>Office Action Summary</b>	Application No. 10/711,670	Applicant(s) LEE ET AL.	
	Examiner Ping Lee	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 13-16, several terms specified in these lack clear antecedent basis. For example, "the loud speaker", "the first microphone", and "the second microphone" have never specified before. Applicant must revise the claim to comply with 112, 2<sup>nd</sup> paragraph requirement.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 2, 5-8 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumhauer, Jr. et al (hereafter Baumhauer) (US005121426A) in view of Ryan et al (hereafter Ryan) (US007123735B2)

Regarding claims 1 and 5-7, Baumhauer discloses, in Fig. 15 in combination with Figs. 6, 8, 10 and 21, a dual microphone module communication device for a teleconference system having multiple microphone ports (see Fig. 10), comprising, within each microphone port:

a first microphone module (200-1 in Fig. 6) for receiving a near-end audio signal and amplifying the near-end audio signal to produce a first audio signal;

a second microphone module (200-2) for receiving the near-end audio signal, wherein the second microphone module has a fixed gain (there is not gain modification for the signal from 200-2 to 230) and the second microphone module shifts (by 220) a phase of the near-end audio signal to produce a second audio signal with a phase difference relative to the near-end audio signal; and

a mixer circuit (230) for receiving the first audio signal and the second audio signal and subtracting the second audio signal from the first audio signal to produce a third audio signal; wherein the dual microphone module communication device is characterized in that a first microphone (200-1) and a second microphone (200-2) faces a predetermined direction (at  $0^\circ$  as shown in Fig. 8) for receiving the near-end audio signal and a loudspeaker faces a direction within a range just opposite to the predetermined direction (the loudspeaker is located at  $180^\circ$  null as disclosed in col. 8, lines 31-34).

Baumhauer fails to shows that the direction in which the loudspeaker outputs a far-end audio signal (from a party remotely located and perform conversation through television line as shown in Fig. 21) is opposite to the predetermined direction (major lobe). Ryan teaches that patent 4,078,155 having a telephone with the direction of the loudspeaker is opposite the direction microphone. Ryan further teaches that for directional microphone (microphones in Baumhauer), the mounting of the microphone could be adjusted, so the microphone's minimum sensitivity (the null at  $180^\circ$ , which is

opposite to the direction of the microphone at 0° as shown in Fig. 8 of Baumhauer) is the same direction as the direction of the microphone (col. 2, lines 23-37). Thus, it would have been obvious to one of ordinary skill in the art to modify Baumhauer in view of Ryan by mounting the microphone at a location such that the direction of the loudspeaker is opposite of the direction of the microphone in order to improve the speech reception.

Regarding claim 2, Baumhauer shows a loudspeaker (in the middle under the circle); and a control unit (as shown in Fig. 21) coupled to the mixer circuit and the loudspeaker, wherein the control unit receives a far-end audio signal from a far-end communication terminal via a communication network (coupled to the telephone line) and broadcasts the far end audio signal through the loudspeaker, and the control unit also converts the third audio signal into an electrical audio frequency signal and transmits the audio frequency signal to the far-end communication terminal via the communication network.

Claims 8 and 11-13 specify a teleconferencing system that is similar to the one as discussed for claims 1, 2 and 5-7 above.

Claims 14-17 specify a method of carrying out a teleconference using the system as discussed for claims 1, 2 and 5-7 above.

5. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumhauer and Ryan as applied to claims 1 and 8 above, and further in view of Miller, II (hereafter Miller) (US 51029,215).

Regarding claims 4 and 10, Baumhauer fails to show a gain modulation circuit. Baumhauer teaches the basic second-order pressure gradient microphone system with providing the detail circuitry coupled to each microphone. Miller teaches the specific of having a pre-amplifier coupled to each microphone. See. Fig. 3. Thus, it would have been obvious to one of ordinary skill in the art to modify Baumhauer and Ryan by having pre-amplifier coupled to the microphones as taught by Miller in order to amplify the microphone signal to proper signal level.

### ***Response to Arguments***

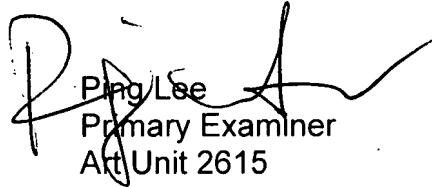
6. Applicant's arguments with respect to claims 1, 8 and 14 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522.

The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Ping Lee  
Primary Examiner  
Art Unit 2615

pwl